

Notice of Allowability

Application No.

10/622,482

Applicant(s)

CAMPBELL, KRISTY A.

Examiner

Matthew Landau

Art Unit

2815

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the RCE filed 12/22/2005.
2. ☒ The allowed claim(s) is/are 1-51 and 54-172.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

Response to Amendment

The declaration filed under 37 CFR 1.132 filed November 30, 2005 is sufficient to overcome the 102(e) and double patenting rejections relying on US Patent 6,813,178.

Allowable Subject Matter

Claims 1-51 and 54-172 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claims 1 and 130, the prior art of record, either singularly or in combination, does not disclose or suggest the combination of limitations including a plurality of layers configured to maintain a resistance state set by a programming voltage applied across said plurality of layers.

Regarding claim 33, the prior art of record, either singularly or in combination, does not disclose or suggest the combination of limitations including a first glass layer in contact with at least one silver-chalcogenide layer, and at least one silver layer in contact with said silver-chalcogenide layer, said silver layer being in contact with a second glass layer.

Regarding claims 57, 89, 98, 112, and 148, the prior art of record, either singularly or in combination, does not disclose or suggest the combination of limitations including a first glass layer; a first metal-containing layer in contact with said first glass layer; a first silver layer in contact with said first metal-containing layer; and a second glass layer in contact with said first silver layer.

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Regarding claim 76, the prior art of record, either singularly or in combination, does not disclose or suggest the combination of limitations including a chalcogenide glass layer; at least one metal-containing layer in contact with said chalcogenide glass layer; at least one silver layer in contact with said metal-containing layer; and a diffusion control layer in contact with said silver layer.

Regarding claims 157 and 165, the prior art of record, either singularly or in combination, does not disclose or suggest the combination of limitations including a plurality of chalcogenide glass layers, a plurality of metal-containing layers, and a plurality of silver layers between said first and second electrodes, each of said plurality of metal-containing layers being in contact with at least one of said plurality of silver layers, whereby said plurality of chalcogenide glass layers alternate with said metal-containing layers and said silver layers.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Landau whose telephone number is (571) 272-1731.

The examiner can normally be reached from 8:30 AM - 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Parker can be reached on (571) 272-2298. The fax phone numbers for the organization where this application

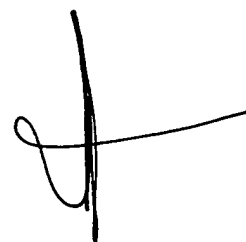
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or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should any questions arise regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew C. Landau

January 6, 2006

A handwritten signature in black ink, appearing to be 'K. Parker', with a vertical line through the middle of the signature.

KENNETH PARKER
SUPERVISORY PATENT EXAMINER